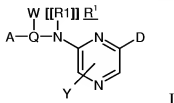


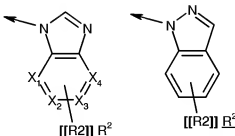
CLAIM AMENDMENTS

1. (currently amended): A compound of ~~the general~~ formula (I)



or pharmaceutically acceptable ~~products~~, salts, hydrates, solvates, crystal forms or diastereomers thereof, wherein:

D is a heterocyclic ring selected from:



where X₁, X₂, X₃, X₄ are optionally substituted carbon, or one of X₁, X₂, X₃, X₄ is nitrogen and the rest optionally substituted carbon;

[R2] R² is 0-3 substituents independently ~~chosen from H~~, selected from the group consisting of halogen, C₁₋₄ alkyl, CF₃, OCF₃, OCHF₂, CN, aryl, hetaryl, C₁₋₄ alkylOH, C₁₋₄alkylNR³R⁴, C₁₋₄alkylNR³R⁴, C₁₋₄alkylhetaryl, OC₁₋₄ alkyl, ~~OC₁₋₄alkylNR³R⁴~~, OC₁₋₄alkylhetaryl, OC₁₋₄ alkylOH, CO₂R³, CONR³R⁴, NR³R⁴ CO₂R³, CONR³R⁴, NR³R⁴, nitro, NR³COR⁴, NR⁵CONR³R⁴, NR³SO₂R⁴, C₁₋₄alkylNR³COR⁴, C₁₋₄alkylNR⁵CONR³R⁴, C₁₋₄alkylNR³SO₂R⁴ NR³COR⁴, NR⁵CONR³R⁴, NR³SO₂R⁴, C₁₋₄alkylNR³COR⁴, C₁₋₄alkylNR⁵CONR³R⁴ and C₁₋₄alkylNR³SO₂R⁴;

[R3, R4] R³, R⁴ are each independently H, C₁₋₄ alkyl, C₁₋₄alkylOH, ~~C₁₋₄alkylNR¹⁹R²⁰~~, C₁₋₄ alkyl cycloalkyl, C₁₋₄ C₃₋₈ cyclohetalkyl, aryl, C₁₋₄ alkylaryl, hetaryl, or C₁₋₄ alkylhetaryl, or may be joined to form an optionally substituted 3-8 membered (saturated or unsaturated) ring optionally containing an atom selected from O, S[[, NR6]] and NR⁶;

and ~~[[R5]] R⁵ is selected from~~ H, C₁₋₄ alkyl, aryl or hetaryl;

[[R6]] R⁶ is selected from the group consisting of H, C₁₋₄ alkyl, C₁₋₄alkylNR¹⁹R²⁰, aryl, hetaryl, C₁₋₄ alkyl aryl[[I,]] and C₁₋₄ alkyl hetaryl;

R¹⁹, R²⁰ R¹⁹, R²⁰ are each independently selected from H, H or C₁₋₄alkyl;

[[R1]] R¹ is H, C₁₋₄ alkyl, C₁₋₆ cycloalkyl, or may form a 5-8 membered ring onto the ortho position of ring A;

Q is a bond, CH, C₁₋₄ alkylene;

A is aryl[[I,]] or hetaryl optionally substituted with 0-3 substituents independently chosen selected from the group consisting of halogen, C₁₋₄ alkyl, CF₃, OCF₃, CN, [[NR⁸R⁹]] NR⁸R⁹, aryl, hetaryl, C₁₋₄aryl, C₁₋₄hetaryl, C₁₋₄alkylNR⁸R⁹, OC₁₋₄alkylNR⁸R⁹, C₁₋₄alkylNR⁸R⁹, OC₁₋₄alkylNR⁸R⁹, nitro, NR¹⁰C₁₋₄NR⁸R⁹, NR⁸COR⁹, NR¹⁰CONR⁸R⁹, NR⁸SO₂R⁹, CONR⁸R⁹, CO₂R⁸NR¹⁰C₁₋₄NR⁸R⁹, NR⁸COR⁹, NR¹⁰CONR⁸R⁹, NR⁸SO₂R⁹, CONR⁸R⁹ and CO₂R⁸;

R⁸ and R⁹ R⁸ and R⁹ are each independently H, C₁₋₄ alkyl, aryl or together form an optionally substituted 4-8 membered ring which may contain a heteroatom selected from O, S[[, NR¹¹]] and NR¹¹;

R¹⁰ is selected from H, R¹⁰ is H or C₁₋₄ alkyl;

R¹¹ is selected from H, R¹¹ is H or C₁₋₄ alkyl;

Q is CH or trivalent alkylene; and

W is selected from H, C₁₋₄alkyl, or C₂₋₆alkenyl or may form a 5-8 membered ring onto the ortho position of ring A; where C₁₋₄alkyl or C₂₋₆alkenyl may be optionally substituted with C₁₋₄alkyl, OH, OC₁₋₄alkyl[[, NR¹²R¹³]] or NR¹²R¹³;

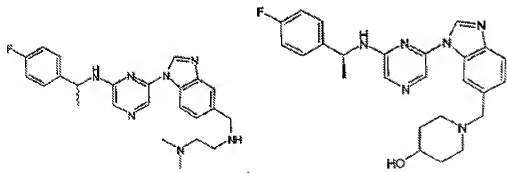
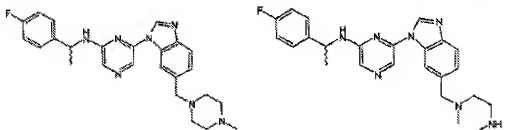
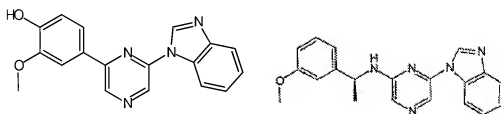
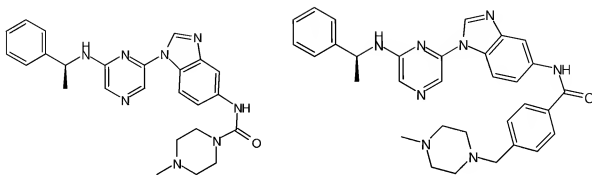
R¹², and R¹³ R¹² and R¹³ are each independently H, C₁₋₄alkyl, or may be joined to form an optionally substituted 3-8 membered ring optionally containing an atom selected from O, S[[, NR¹⁴]] and NR¹⁴;

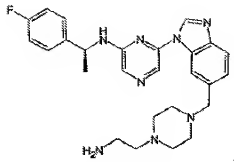
R¹⁴ is selected from H, R¹⁴ is H or C₁₋₄ alkyl; or

Q and W are absent;

Y is 0-2 substituents selected from H, C₁₋₄ alkyl, NR¹⁵R¹⁶ NR¹⁵R¹⁶;

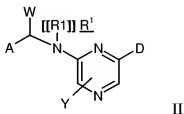
R¹⁵ and R¹⁶ R¹⁵ and R¹⁶ are independently selected from H, H or C₁₋₄alkyl; or a compound selected from a group consisting of;





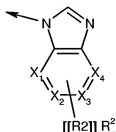
and pharmaceutically acceptable salts, hydrates, solvates, crystal forms or diastereomers thereof.

2. (currently amended): A compound according to formula (I) of claim 1, wherein the compound is ~~selected from compounds of the general formula (II):~~



or pharmaceutically acceptable ~~prodrugs~~, salts, hydrates, solvates, crystal forms or diastereomers thereof, wherein:

D is a heterocyclic ring ~~selected from~~ of the formula:



where X_1 , X_2 , X_3 , X_4 are optionally substituted carbon, or one of X_1 , X_2 , X_3 , X_4 is N and the rest optionally substituted carbon;

$[(R2)] R^2$ is 0-3 substituents independently ~~chosen from H,~~ selected from the group consisting of halogen, C_{1-4} alkyl, CF_3 , OCF_3 , $OCHF_2$, CN, aryl, hetaryl, C_{1-4} alkylOH, C_{1-4} alkylNR 3 R 4 , C_{1-4} alkylNR 3 R 4 , C_{1-4} alkylhetaryl, OC_{1-4} alkyl, OC_{1-4} alkylNR 3 R 4

OC₁₋₄alkylNR³R⁴, OC₁₋₄alkylhetaryl, OC₁₋₄alkylOH, CO₂R³, CONR³R⁴, NR³R⁴, CO₂R³, CONR³R⁴, NR³R⁴, nitro, NR³COR⁴, NR⁵CONR³R⁴, NR³SO₂R⁴, C₁₋₄alkylNR³COR⁴, C₁₋₄alkylNR⁵CONR³R⁴, C₁₋₄alkylNR³SO₂R⁴, NR³COR⁴, NR⁵CONR³R⁴, NR³SO₂R⁴, C₁₋₄alkylNR³COR⁴, C₁₋₄alkylNR⁵CONR³R⁴ and C₁₋₄alkylNR³SO₂R⁴;

[[R3, R4]] R³, R⁴ are each independently H, C₁₋₄ alkyl, C₁₋₄alkylOH, C₁₋₄alkylNR¹⁹R²⁰, C₁₋₄ alkyl cycloalkyl, C₁₋₄ C₃₋₈ cyclohetalkyl, aryl, C₁₋₄ alkylaryl, hetaryl, or C₁₋₄ alkylhetaryl, or may be joined to form an optionally substituted 3-8 membered (saturated or unsaturated) ring optionally containing an atom selected from O, S[[, NR⁶]] and NR⁶;

and [[R5]] R⁵ is selected from H, C₁₋₄ alkyl, aryl or hetaryl;

[[R6]] R⁶ is selected from the group consisting of H, C₁₋₄ alkyl, C₁₋₄alkylNR¹⁹R²⁰, C₁₋₄alkylNR¹⁹R²⁰, aryl, hetaryl, C₁₋₄ alkyl aryl, and C₁₋₄ alkyl hetaryl;

[[R19, R20]] R¹⁹, R²⁰ are each independently selected from H, H or C₁₋₄alkyl;

[[R1]] R¹ is H, C₁₋₄ alkyl, C₁₋₆ cycloalkyl, or may form a 5-8 membered ring onto the ortho position of ring A;

A is aryl, hetaryl optionally substituted with 0-3 substituents independently ~~chosen~~ selected from the group consisting of halogen, C₁₋₄ alkyl, CF₃, OCF₃, CN, ~~NR⁸R⁹~~ NR⁸R⁹, aryl, hetaryl, C₁₋₄aryl, C₁₋₄hetaryl, ~~C₁₋₄alkylNR⁸R⁹, OC₁₋₄alkylNR⁸R⁹~~ C₁₋₄alkylNR⁸R⁹, OC₁₋₄alkylNR⁸R⁹, nitro, NR¹⁰C₁₋₄NR⁸R⁹, NR⁸COR⁹, NR¹⁰CONR⁸R⁹, NR⁸SO₂R⁹, CONR⁸R⁹, CO₂R⁸, NR¹⁰C₁₋₄NR⁸R⁹, NR⁸COR⁹, NR¹⁰CONR⁸R⁹, NR⁸SO₂R⁹, CONR⁸R⁹ and CO₂R⁸;

R⁸ and R⁹ R⁸ and R⁹ are each independently H, C₁₋₄ alkyl, aryl or together form an optionally substituted 4-8 membered ring which may contain a heteroatom selected from O, S[[, NR¹¹]] and NR¹¹;

R¹⁰ is selected from H, R¹⁰ is H or C₁₋₄ alkyl;

R¹¹ is selected from H, R¹¹ is H or C₁₋₄ alkyl;

W is selected from the group consisting of H, C₁₋₄alkyl, and C₂₋₆alkenyl or may form a 5-8 membered ring onto the ortho position of ring A; where C₁₋₄alkyl or C₂₋₆alkenyl may be optionally substituted with C₁₋₄alkyl, OH, OC₁₋₄alkyl[[, NR¹²R¹³]] and NR¹²R¹³,

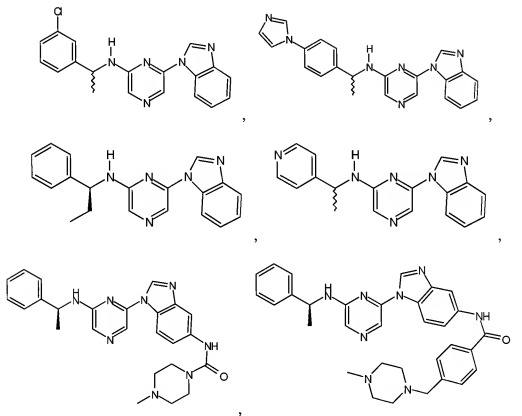
~~R¹², and R¹³~~ ¹² and ¹³ are each independently H, C₁₋₄alkyl, or may be joined to form an optionally substituted 3-8 membered ring optionally containing an atom selected from O, S[[, NR¹⁴]] and NR¹⁴;

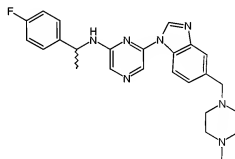
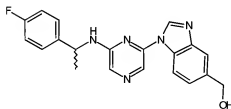
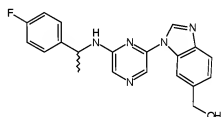
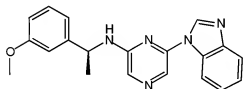
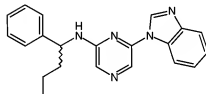
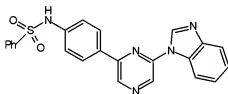
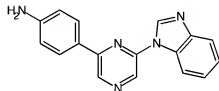
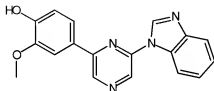
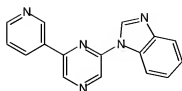
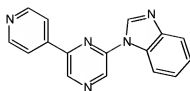
~~R¹⁴ is selected from H,~~ ¹⁴ is H or C₁₋₄ alkyl;

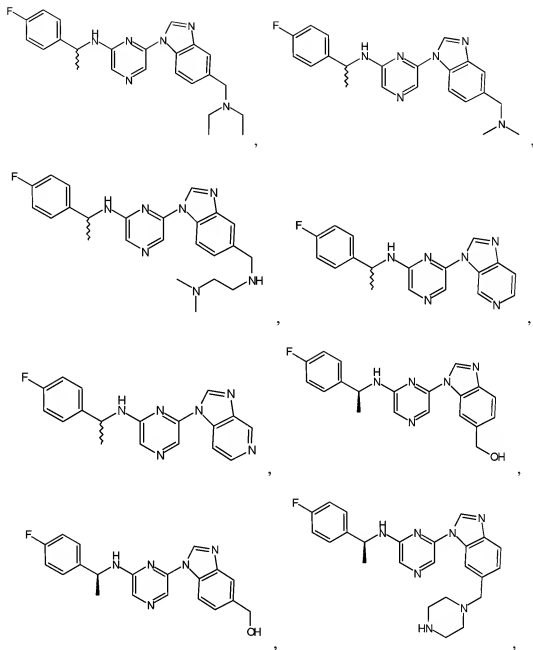
Y is 0-2 substituents selected from the group consisting of H,
C₁₋₄ alkyl[[, NR¹⁵R¹⁶]] and NR¹⁵R¹⁶;

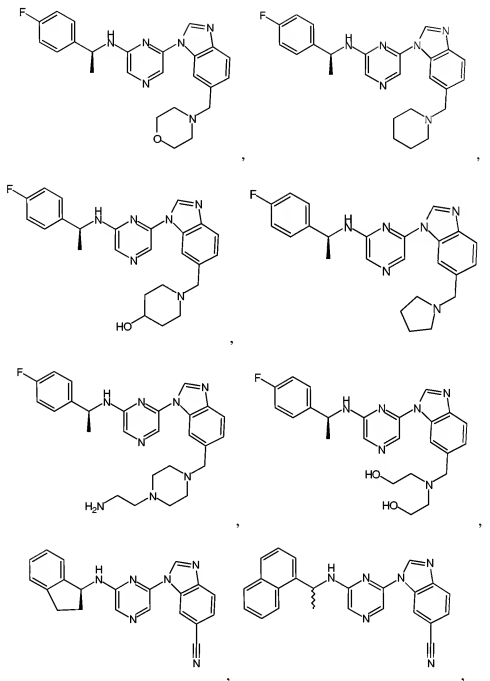
~~R¹⁵ and R¹⁶~~ ¹⁵ and ¹⁶ are independently selected from H, H or C₁₋₄alkyl; and
a pharmaceutically acceptable salt, hydrate, solvate, crystal form or diastereomer thereof.

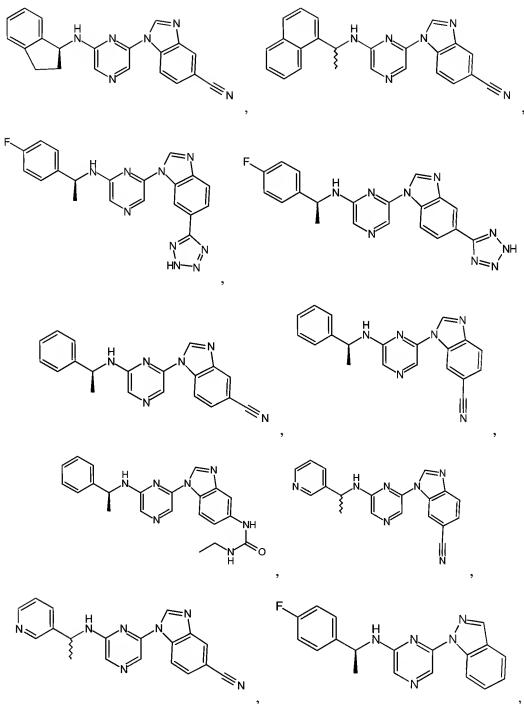
3. (currently amended): A compound selected from the group consisting of:

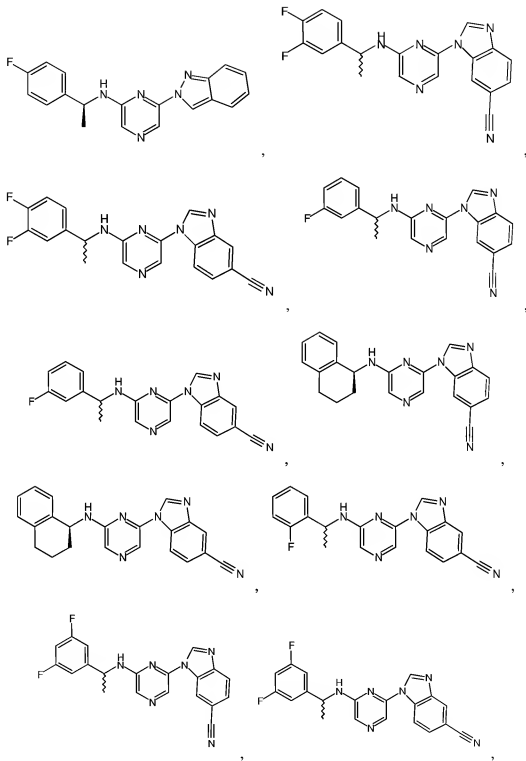


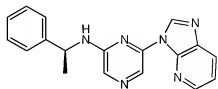
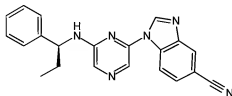
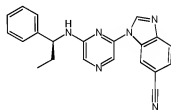
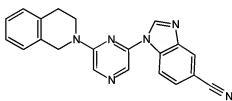
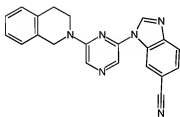
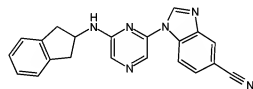
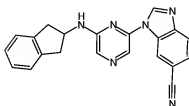
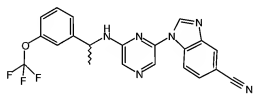
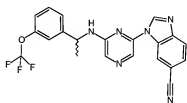
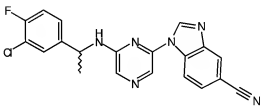
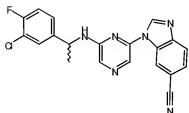
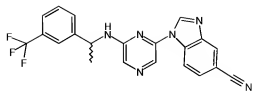
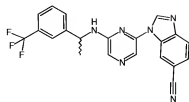


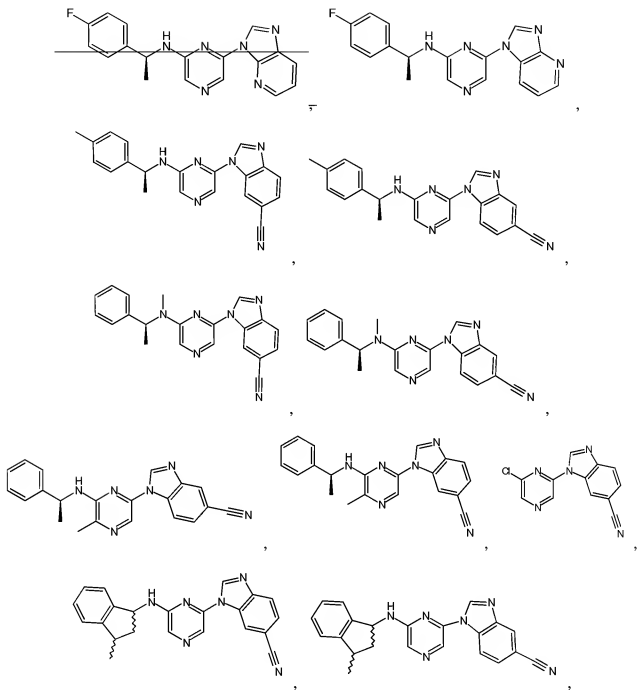












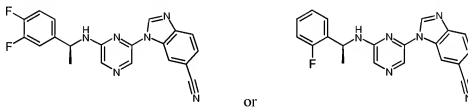
or pharmaceutically acceptable salts, hydrates, solvates, crystal forms or diastereomers thereof.

4. (currently amended): A compound according to formula (I) of claim 1 selected from the group consisting of

- 6-(1H-Benzimidazol-1-yl)-N-benzylpyrazin-2-amine,
- 6-(1H-Benzimidazol-1-yl)-N-[(1R)-1-phenylethyl]pyrazin-2-amine,
- 6-(1H-Benzimidazol-1-yl)-N-[(1S)-1-phenylethyl]pyrazin-2-amine,
- 1-(6-[[1-(3-Fluorophenyl)ethyl]amino]pyrazin-2-yl)-1H-benzimidazole-5-carboxamide,
- 1-(6-[[1-(3-Fluorophenyl)ethyl]amino]pyrazin-2-yl)-1H-benzimidazole-6-carboxamide,
- 1-(6-[[1-(3-Fluorophenyl)ethyl]amino]pyrazin-2-yl)-1H-benzimidazole-6-carbonitrile,
- 1-[6-(3,4-Dihydroisoquinolin-2(1H)-yl)pyrazin-2-yl]-1H-benzimidazole-5-carbonitrile,
- 1-[6-(3,4-Dihydroisoquinolin-2(1H)-yl)pyrazin-2-yl]-1H-benzimidazole-6-carbonitrile,
- 1-[6-[(1S)-1,2,3,4-Tetrahydronaphthalen-1-ylamino]pyrazin-2-yl]-1H-benzimidazole-5-carbonitrile,
- 1-[6-[(1S)-1,2,3,4-Tetrahydronaphthalen-1-ylamino]pyrazin-2-yl]-1H-benzimidazole-6-carbonitrile,
- 1-(6-[[1-(1S)-1-Phenylethyl]amino]pyrazin-2-yl)-1H-benzimidazol-5-amine,
- 1-(6-[[1-(1S)-1-Phenylethyl]amino]pyrazin-2-yl)-1H-benzimidazol-6-amine,
- N-[1-(6-[[1-(1S)-1-Phenylethyl]amino]pyrazin-2-yl)-1H-benzimidazol-6-yl]-2,2-dimethylpropanamide,
- N-[1-(6-[[1-(1S)-1-Phenylethyl]amino]pyrazin-2-yl)-1H-benzimidazol-5-yl]acetamide,
- N-[1-(6-[[1-(1S)-1-Phenylethyl]amino]pyrazin-2-yl)-1H-benzimidazol-5-yl]methanesulfonamide,
- 2-(S- α -Methylbenzylamino)-6-(5-(N-methylpiperazin-4-yl-methyl)-benzimidazo-1-yl)-pyrazine,
- [1-(6-[[1-(4-Fluorophenyl)ethyl]amino]pyrazin-2-yl)-1H-benzimidazol-5-yl]methanol,

[1-(6-[[1-(4-Fluorophenyl)ethyl]amino]pyrazin-2-yl)-1H-benzimidazol-6-yl]methanol, and N-[1-(4-Fluorophenyl)ethyl]-6-[[6-[(4-methylpiperazin-1-yl)methyl]-1H-benzimidazol-1-yl]pyrazin-2-amine, and a pharmaceutically acceptable salt, hydrate, solvate, crystal form or diastereomer thereof.

5. (currently amended): The compound of claim 3, wherein said compound is:



or a pharmaceutically acceptable ~~prodrug~~, salt, hydrate, solvate, crystal form or diastereomer thereof.

6. (canceled)

7. (currently amended): A composition comprising a carrier and at least one compound according to ~~claim 3~~ claim 1.

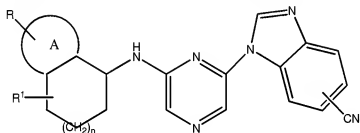
8. (currently amended): A method of treating ~~a tyrosine kinase associated disease state leukemia or lymphoma~~ in a subject, the method comprising administering a therapeutically effective amount of a compound according to ~~claim 3~~ claim 1 or a pharmaceutical composition thereof.

- 9-12. (canceled)

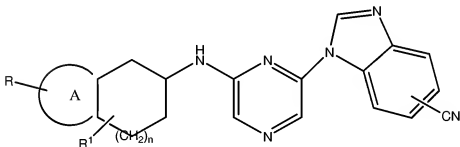
13. (previously presented): The compound of claim 1, wherein Y is 1-2 substituents.

14. (currently amended): The compound of claim 1, wherein Y is 0 substituents and ~~[[R2]] R² is OCHF₂, CN, C₁₋₄ alkylOH, C₁₋₄alkylhetaryl, OC₁₋₄ alkyl, ~~OC₁₋₄alkylNR³R⁴~~ OC₁₋₄alkylNR³R⁴, OC₁₋₄alkylhetaryl, or OC₁₋₄ alkylOH.~~

15. (currently amended): The compound of claim 1, wherein $[[R2]] R^2$ is CN.
16. (currently amended): The compound of claim 1, wherein $[[R1]] R^1$ forms a 5-8 membered ring onto the ortho position of ring A.
17. (previously presented): The compound of claim 16, wherein Q is CH and W is H.
18. (currently amended): A compound having the formula



or



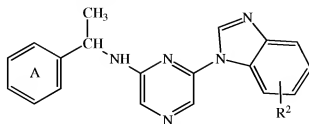
wherein A is phenyl;

n is 0 or 1;

R is H, OCH₃ or halo; and

$[[R1]] R^1$ is H or CH₃.

19. (new): The compound of claim 1 which is the formula



wherein R^2 is 0-3 substituents independently selected from the group consisting of halogen, C_{1-4} alkyl, CF_3 , OCF_3 , $OCHF_2$, CN, aryl, hetaryl, C_{1-4} alkylOH, C_{1-4} alkylNR³R⁴, C_{1-4} alkylhetaryl, OC_{1-4} alkyl, OC_{1-4} alkylNR³R⁴, OC_{1-4} alkylhetaryl, OC_{1-4} alkylOH, CO_2R^3 , $CONR^3R^4$, NR^3R^4 , nitro, NR^3COR^4 , $NR^5CONR^3R^4$, $NR^3SO_2R^4$, C_{1-4} alkylNR³COR⁴, C_{1-4} alkylNR⁵CONR³R⁴ and C_{1-4} alkylNR³SO₂R⁴;

R^3 , R^4 are each independently H, C_{1-4} alkyl, C_{1-4} alkylOH, C_{1-4} alkylNR¹⁹R²⁰, C_{1-4} alkyl cycloalkyl, C_{3-8} cyclohetalkyl, aryl, C_{1-4} alkylaryl, hetaryl, or C_{1-4} alkylhetaryl, or may be joined to form an optionally substituted 3-8 membered (saturated or unsaturated) ring optionally containing an atom selected from O, S and NR⁶;

and R^5 is H, C_{1-4} alkyl, aryl or hetaryl;

R^6 is selected from the group consisting of H, C_{1-4} alkyl, C_{1-4} alkylNR¹⁹R²⁰, aryl, hetaryl, C_{1-4} alkyl aryl and C_{1-4} alkyl hetaryl;

R^{19} , R^{20} are each independently H or C_{1-4} alkyl;

and wherein ring A is optionally substituted with 0-3 substituents independently selected from the group consisting of halogen, C_{1-4} alkyl, CF_3 , OCF_3 , CN, NR^8R^9 , aryl, hetaryl, C_{1-4} aryl, C_{1-4} hetaryl, C_{1-4} alkylNR⁸R⁹, OC_{1-4} alkylNR⁸R⁹, nitro, $NR^{10}C_{1-4}NR^8R^9$, NR^8COR^9 , $NR^{10}CONR^8R^9$, $NR^8SO_2R^9$, $CONR^8R^9$ and CO_2R^8 ;

R^8 and R^9 are each independently H, C_{1-4} alkyl, aryl or together form an optionally substituted 4-8 membered ring which may contain a heteroatom selected from O, S and NR¹¹;

R^{10} is H or C_{1-4} alkyl; and

R^{11} is H or C_{1-4} alkyl.